

WHAT IS CLAIMED IS:

1. A modular jack with a connection cap, comprising:

a housing which receives a modular plug to the front surface and couples an insert and a printed circuit board to the rear surface;

a back cover which is detachably coupled to the rear surface of the housing and provided with a plurality of penetration grooves through which IDC terminals fixed to the printed circuit board are penetrated; and

a connection cap which is detachably coupled to the rear surface of the back cover and provided with terminal insertion grooves for inserting the plurality of IDC terminals protruded by penetrating the penetration grooves and a plurality of wire insertion grooves for inserting wires of a communication line, the terminal insertion grooves and the wire insertion grooves orthogonal to each other.

2. The modular jack of claim 1, wherein the back cover comprises:

two penetration groove blocks which is provided with a plurality of penetration grooves through which the IDC terminals fixed in two lateral rows on the rear surface of the printed circuit board;

a back cover main body which is integrally formed to support the two penetration groove blocks;

coupling hooks which are protruded forward on both opposite side faces of the back cover main body and detachably coupled to the housing; and

guide plates which are protruded rearward on the upper and lower surfaces of the back cover main body and provided on the inner side surface with guide grooves for guiding the connection cap.

3. The method of claim 1, wherein the connection cap comprises:

a plurality of terminal insertion grooves for inserting the upper end portions of the IDC terminals protruded to the rear side of the penetration groove blocks;

two connection blocks which are provided with a plurality of wire insertion grooves formed orthogonal to the terminal insertion grooves so that the wires of the communication line can be inserted into the connection slits of the IDC terminals;

a connection cap main body which is integrally formed so as to support the two connection blocks;

guide projection which are formed on the upper and lower surfaces of the connection cap main body and guided by guide grooves formed on the guide plates of the back cover; and

detachable hooks which are integrally formed to the guide projections and detachably coupled to the back cover.

4. The modular jack of claim 1, wherein the IDC terminals fixed to the printed circuit board are fixed zigzag so that the distance between the terminals becomes longer, and the penetration grooves of the penetration groove blocks and the terminal insertion grooves of the connection block are formed zigzag so as to correspond to the IDC terminals.

5. A modular jack, comprising

a housing which is provided with a plug insertion port formed on the front surface;

an insert which is coupled to a coupler formed on the rear surface of the housing;

a printed circuit board which is electrically connected to the insert and mounted to the rear surface of the housing;

a plurality of IDC terminals which are electrically connected and fixed to the rear surface of the housing;

a back cover which is detachably coupled to the rear surface of the housing and provided with a plurality of penetration grooves through which the IDC terminals are penetrated; and

a connection cap which is detachably coupled to the rear surface of the back cover and provided with terminal insertion grooves for inserting the plurality of IDC terminals protruded rearward through the IDC terminal penetration grooves and a plurality of wire insertion grooves for inserting wires, the terminal insertion grooves and the wire insertion grooves being orthogonal to each other.